

Work Order ID 77447

December-07-11 11:05:52 AM

\*77447\*

Page 1

Item ID: D350-578-011

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Bearpaw

7

Start Date: 07/12/2011 Start Qty: 8.00

\*8\*

Cust Item ID:

Required Date: 28/12/2011 Req'd Qty: 8.00

\*8\*

Customer:

Reference:

Approvals: Process Plan: M.L.J

Date: 11/12/07 Tooling:

Date:

Run Start

\*NR1\*

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N):

Date: \_\_\_\_\_

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2432	Rev F3

100

\*100\*

DC

Document Control

DOCUMENT CONTROL

50e

0.00

0.00

Photocopy bluefile and create labels per PPP D350-578-011 CHG005

W 12 01 25 (7)  
for M.L.J 12-1-24 (8)

160

\*160\*

Packaging

Packaging

Pick Kit

0.00

12/1/24 50e

170

\*170\*

QC

Quality Control

QC4- 100% Inspect kits for completeness

0.00

Memo

0.00

W 12 01 25 (7)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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\*77447\*

Page 2

Item ID: D350-578-011

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Bearpaw

Stop

\*NS2\*

Start Date: 07/12/2011 Start Qty: 8.00

\*8\*

Cust Item ID:

Required Date: 28/12/2011 Req'd Qty: 8.00

\*8\*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

180

\*180\*

Packaging

Packaging

Packaging

Memo

Identify and pack for shipping as per PPP D350-578-011 Location: *101a*

190

\*190\*

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

Accept

Tool ID

Tool #

Plan

Code

Accept

Qty

Reject

Qty

Reject

Number

Insp.

Stamp

12/1/25

SL

7

12/1/30

28

12/01/26

MF

W/O:		WORK ORDER CHANGES							
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

December-07-11 11:05:57 AM

Page 1

Work Order ID: 77447

\*77447\*

Parent Item: D350-578-011

\*D350-578-011\*

Parent Item Name: Bearpaw

Start Date: 07/12/2011

Required Date: 28/12/2011

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:A New Issue 07-01-02 JLM

IPP Rev:B 08-01-09 Added Step 2 JLM Verified By:EC

IPP Rev:C 08-10-15 New Manufacturing Method JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN4-17A		Purchased		No		160	Each	600.0000	12	96	96		**

\*AN4-17A\*  
Bolt

Location	Loc Qty	Loc Code
ST359	600	
118628	200	
118983	300	
119798	100	

D2182B	Manufactured	No	160	f	650.0942	2.5	20	96	96	96	96	96	**
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\*D2182B\*

Rubber Cushion

Location	Loc Qty	Loc Code
ST410	650.09417	
66063	59.94817	
73932	590.146	

D2274	Manufactured	No	160	Each	191.0000	12	96	16	96	16	96	16	**
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\*D2274\*

Radius Block

Location	Loc Qty	Loc Code
ST010	1	
73389	1	

Location	Loc Qty	Loc Code
ST139	190	
74435	190	

D2432	Manufactured	No	160	Each	0.0000	2	16	14x	14x	14x	14x	14x	**
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\*D2432\*

206 (24") Bearpaw

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Page 2

Work Order ID: 77447

\*77447\*

Parent Item: D350-578-011

\*D350-578-011\*

Parent Item Name: Bearpaw

Start Date: 07/12/2011

Start Qty: 8.00

6  
48  
\*\*

Required Date: 28/12/2011

Required Qty: 8.00

11/x

D2438  
\*D2438\*  
Clamp

Manufactured No 160 Each 181.0000

Location	Loc Qty	Loc Code
ST456	181	
69737	84	
73400	97	

13  
24  
12  
96  
\*\*

B79038

D2529  
\*D2529\*  
Washer

Manufactured No 160 Each 534.0000

Location	Loc Qty	Loc Code
ST016	534	
71161	34	
76086	500	

13  
24  
12  
96  
\*\*

77x  
B79221

MS21042L4  
\*MS21042L4\*  
Nut

Purchased No 160 Each 9,987.0000

Location	Loc Qty	Loc Code
ST300	526	
117441	51	
117601	342	
118451	133	
ST516	4461	
119017	4461	
ST518	5000	
119075	5000	

13  
24  
12  
96  
\*\*

12/1/24

50 (7)

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Work Order ID: 77447

**\*77447\***

Parent Item: D350-578-011

**\*D350-578-011\***

Parent Item Name: Bearpaw

Start Date: 07/12/2011

Required Date: 28/12/2011

Start Qty: 8.00

Required Qty: 8.00

NAS1149D0463J

Purchased

No

160

Each

10,232.00

24

192

\*\*

01/24

*SP 80*

**\*NAS1149D0463.I\***

Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST019	25	
	118179	
ST298	278	
	116025	
	116805	
	117291	
	117460	
	118179	
	118384	
	118612	
	119042	
	9929	
ST407	9760	192
	119075	
	119097	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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NOTE: Date & initial all entries

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33.33%;">F1</td> <td style="width: 33.33%;">99.03.03</td> <td style="width: 33.33%;">ADD DEO 9143</td> </tr> <tr> <td>F2</td> <td>01.03.28</td> <td>Ø0.93 WAS Ø0.75 <del>RF</del></td> </tr> <tr> <td>F3</td> <td>02.01.23</td> <td>CLARIFY BORE DIMS <del>RF</del></td> </tr> </table>			F1	99.03.03	ADD DEO 9143	F2	01.03.28	Ø0.93 WAS Ø0.75 <del>RF</del>	F3	02.01.23	CLARIFY BORE DIMS <del>RF</del>
F1	99.03.03	ADD DEO 9143									
F2	01.03.28	Ø0.93 WAS Ø0.75 <del>RF</del>									
F3	02.01.23	CLARIFY BORE DIMS <del>RF</del>									
<b>RELEASED</b> <small>98.06.17 KB</small>											
											
											
<b>DART AEROSPACE LTD</b> <small>HAWKESBURY, ONTARIO, CANADA</small>											
<b>DESIGN</b> <i>KE</i>	<b>DRAWN BY</b> <i>KE</i>	<b>DRAWING NO.</b> <b>D2432</b>									
<b>CHECKED</b> <i>MM</i>	<b>APPROVED</b> <i>JJ</i>	<b>REV. F</b>									
<b>DATE</b> <b>98.05.12</b>	<b>TITLE</b> <b>BEARPAW</b>	<b>SHEET 1 OF 2</b>									
<b>A</b> 95.10.31	<b>B</b> 96.01.24	<b>C</b> 96.03.26									
<b>D</b> 96.06.04	<b>E</b> 97.02.27	<b>F</b> 98.05.12									
<b>CHANGE C'BORE DEPTH, BORE RADIUS</b> <b>ADD B AND F P/N</b>											
<b>EFFECTIVE</b> <b>9143</b>											
<b>DEOS</b>											

**FLAT PATTERN**

**BEND AFTER MACHINING (D2432B ONLY)**

**D2432F: FLAT BEARPAW**  
**D2432B: BENT BEARPAW**

**ENGRAVE LOGO TO MAX DEPTH OF 0.012. ENGRAVE PART AND BATCH NUMBERS TO MAX DEPTH OF 0.010. (TYPICAL LOCATION AS ILLUSTRATED)**

**Ø0.260 (TYP)**  
**Ø0.75 C'BORE**  
**Ø0.93 C'BORE**  
**0.35 DEEP FROM TOP (MIN.)**  
**0.30 DEEP FROM BOTTOM**  
**(LEAVE 0.300 MIN.)**  
**(LEAVE 0.650 MIN.)**

**SHOP COPY**  
**RETURN TO**  
**ENGINEERING**  
**UNCONTROLLED ED COPY**  
**SUBJECT TO AMENDMENT**  
**WITHOUT NOTICE**  
**WORK ORDER**  
**NO**  
**0.950 (REF)**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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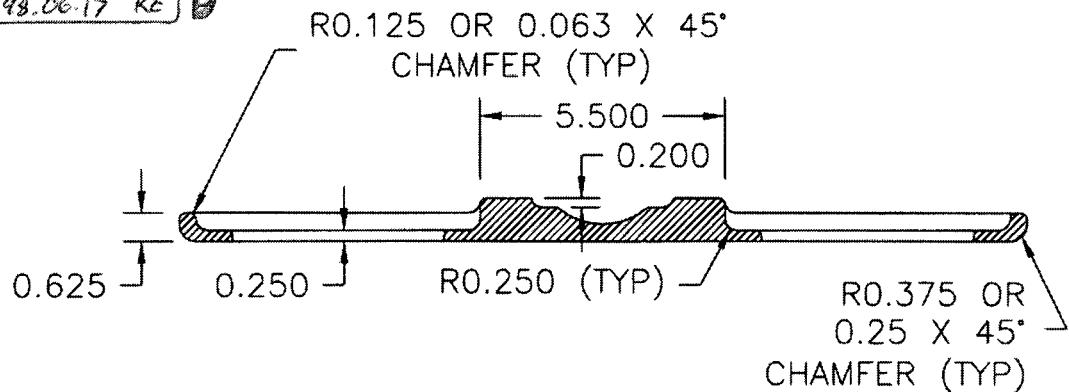
NOTE: Date & initial all entries



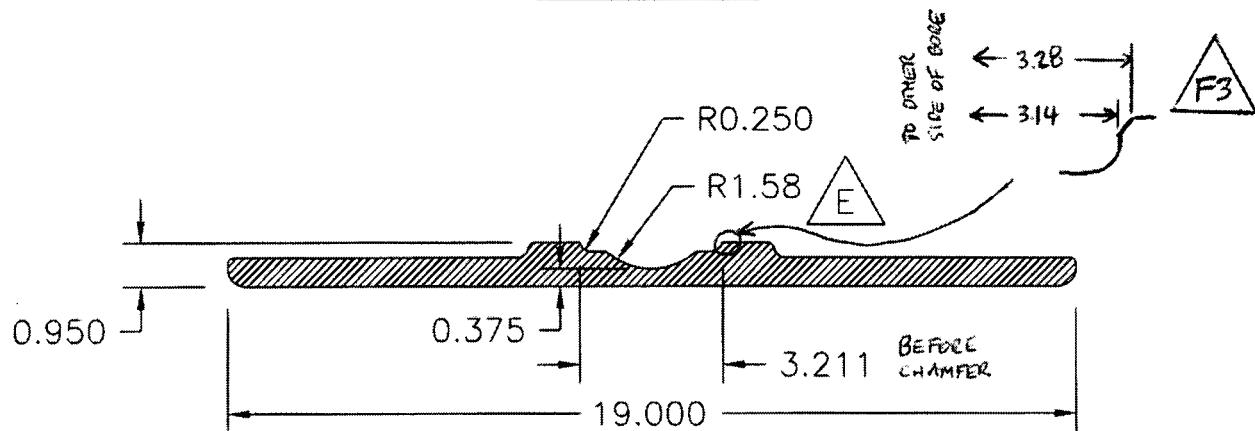
OF COPY ISSUE CO

DESIGN <i>KE</i>	DRAWN BY <i>KE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>DM</i>	APPROVED <i>AS</i>	DRAWING NO. D2432	REV. F SHEET 2 OF 2
DATE 98.05.12		TITLE BEARPAW	SCALE 1:4

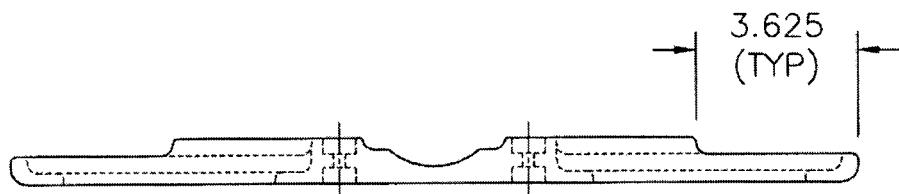
RELEASED  
98.06-17 KE



SECTION A-A



SECTION B-B



SECTION C-C

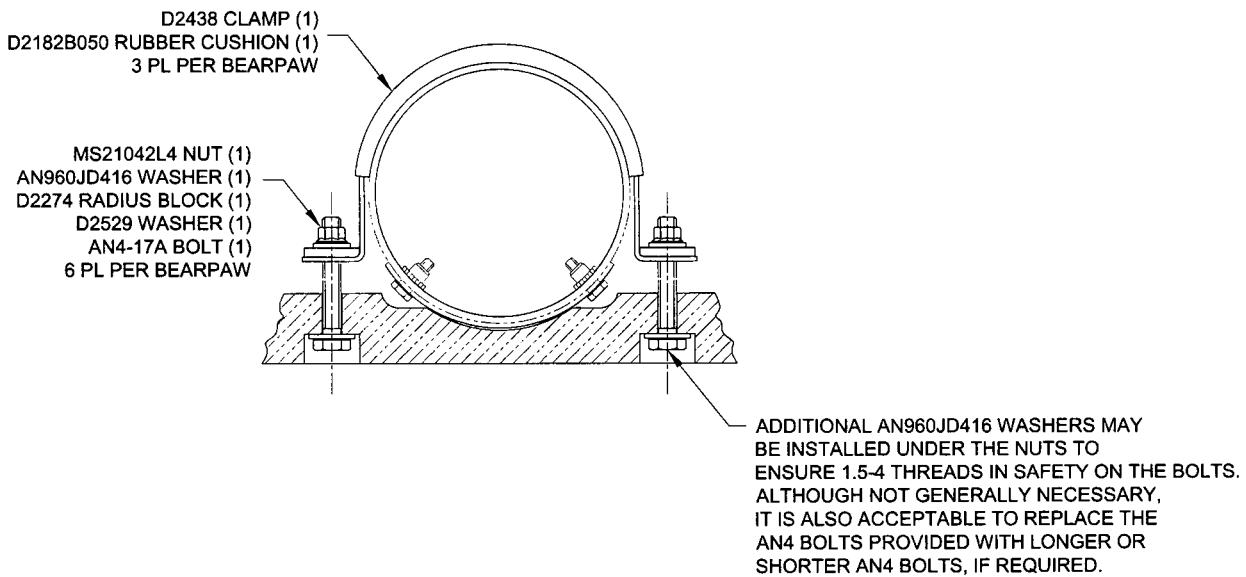
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



Section A-A  
Figure 4 – Clamping Detail

## 5.0 PARTS LIST

Qty -011	Qty -021	Part Number	Description
X		D350-578-011	BEARPAW INSTALLATION
	X	D350-578-021	BEARPAW INSTALLATION
6	6	D2182B050	Rubber Cushion
12	12	D2274	Radius Block
12	12	D2529	Washer
6	6	D2438	Clamp
2		D2432F	Bearpaw
	2	D2672F	Bearpaw
12	12	AN4-17A	Bolt
24	24	AN960JD416	Washer
12	12	MS21042L4	Nut (or MS21042-4)